PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference | FOR FURTHER see Notification o | f Transmittal of International Search Report 20) as well as, where applicable, item 5 below. |
|--|---|---|
| 60152-1021 | ACTION | |
| International application No. | International filing date (day/month/year) | (Earliest) Priority Date (day/month/year) |
| PCT/US 03/38301 | 03/12/2003 | 19/03/2003 |
| Applicant | | |
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| FABRISTEEL PRODUCTS, INC. | | |
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| This International Search Report has bee according to Article 18. A copy is being to | n prepared by this International Searching Aut ansmitted to the International Bureau. | hority and is transmitted to the applicant |
| This International Search Report consists | of a total of sheets. | |
| | a copy of each prior art document cited in this | report. |
| | | |
| Basis of the report All the report to the lenguage the | international search was carried out on the ba | sis of the international application in the |
| language in which it was filed, un | less otherwise indicated under this item. | SIS OF the international approximation in the |
| the international search v Authority (Rule 23.1(b)). | vas carried out on the basis of a translation of | the international application furnished to this |
| b. With regard to any nucleotide as | nd/or amino acid sequence disclosed in the i | nternational application, the international search |
| was carried out on the basis of the | ie sequence listing : onal application in written form. | |
| 4 — — 3 | ernational application in computer readable for | m. |
| | o this Authority in written form. | |
| furnished subsequently t | o this Authority in computer readble form. | |
| the statement that the su international application | bsequently furnished written sequence listing as filed has been furnished. | does not go beyond the disclosure in the |
| the statement that the infurnished | formation recorded in computer readable form | is identical to the written sequence listing has been |
| 2. Certain claims were fo | und unsearchable (See Box I). | |
| 3. Unity of invention is la | cking (see Box II). | |
| 4. With regard to the title, | | |
| | submitted by the applicant. | |
| the text has been estable | shed by this Authority to read as follows: | |
| | | |
| 5. With regard to the abstract, | | |
| | submitted by the applicant. | |
| the text has been estable | ished, according to Rule 38.2(b), by this Authone date of mailing of this international search re | ority as it appears in Box III. The applicant may, eport, submit comments to this Authority. |
| | blished with the abstract is Figure No. | 5A, 5 |
| as suggested by the app | olicant. | None of the figures. |
| X because the applicant fa | ailed to suggest a figure. | • |
| because this figure bette | er characterizes the invention. | |

International application No.

INTERNATIONAL SEARCH REPORT

PCT/US 03/38301

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

A self-diagnosing pierce nut installation apparatus including an installation head (20) attached to an upper die member of a die press having a reciprocating plunger (28) driving a pierce nut (64) against a panel (P), piercing a slug from the panel upon closing of the press and a rod (86) telescopically received in the plunger (28) resiliently biased through the nut bore if a slug is pierced from the panel (P) or against the panel if not pierced, and a sensor sensing axial movement of the rod (86) stopping the press if the rod (86) engages the panel (P). A die located in the lower die member includes a slug sensor (152) confirming receipt of the panel slug (S) through the die member (22).

2004-02-13

INT 3 ... TIONAL SEARCH REPORT

PCT/US 03/38301

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B23P19/06 F16B37/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched (classification system followed by classification symbols)} \\ IPC & 7 & B23P & F16B \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to daim No. |
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| X Further documents are listed in the continuation of box C. | Patent family members are listed in annex. |
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| Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed | 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family |
| Date of the actual completion of the international search 5 April 2004 | Date of mailing of the international search report 14/04/2004 |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | Authorized officer Plastiras, D |

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